

a certificate issuance module for creation of an issued certificate upon selectable acquisition of said virtual certificate by an acquirer user across said network, said issued certificate comprising said redemption denomination and said first public key identifier, said creation of said issued certificate associated
5 with a private key which is assigned at time of said acquisition of said virtual certificate, wherein said private key does not appear on said issued certificate, and wherein said redemption denomination, said first public key identifier, and said assigned private key are stored at said certificate authority in association with said issued certificate;

10 a certificate authentication module for authorization of an off-line redemption of said issued certificate at a redemption location to a holder of said issued certificate located at said redemption location, said holder comprising any of said acquirer user and an alternate recipient of said issued certificate to whom said acquirer user has communicated said private key, said authorization
15 based upon a communication from said redemption location to said certificate authority of said redemption denomination and said first public key identifier from said issued certificate, a communication of said private key provided by said holder, and a matching comparison of said redemption denomination, said first public key identifier, and said private key stored at said certificate authority;

20 and

means to cancel further redemption of said issued certificate at said certificate authority.

7. The certificate system of Claim 6, wherein said means to deliver said
25 redemption denomination and said first public key identifier to said acquirer user comprises a printed form of said issued certificate.

8. The certificate system of Claim 6, wherein said means to deliver said
30 redemption denomination and said first public key identifier to said acquirer user comprises an electronic form of said issued certificate.

C3 10. The certificate system of Claim 1, wherein said holder of said issued certificate is said alternate recipient who submits said private key.

C4 12. The certificate system of Claim 11, wherein said entered, assigned private key is uniquely associated with a single acquired issued certificate.

16. A process within a transaction network, comprising the steps of:

defining a virtual certificate on a certificate authority, said defined virtual certificate comprised of a redemption denomination defined by an issuer user, and a first public key identifier defined by said certificate authority;

10 creating an issued certificate upon acquisition of said virtual certificate by an acquirer user on said transaction network, said issued certificate comprising said redemption denomination and said first public key identifier, said creation of said issued certificate associated with an establishment of a private key which does not appear on said issued certificate, said redemption denomination, said first public key identifier, and said established private key stored at said certificate authority in association with said issued certificate;

C5 15 authorizing an off-line redemption of said issued certificate at a redemption location to a holder of said issued certificate, said holder comprising 20 any of said acquirer user and an alternate recipient of said issued certificate to whom said acquirer user has communicated said private key, wherein said authorization is based upon redemption submittal at said redemption location of said redemption denomination and said first public key identifier from said issued certificate, a communication of said private key provided by said holder, 25 and a matching comparison of said redemption denomination, said first public key identifier, and said private key stored at said certificate authority; and

canceling further redemption of said issued certificate at said certificate authority.

30 21. The process of Claim 16, wherein said step of creation of said issued certificate comprises a delivery of said redemption denomination and said first public key identifier to said acquirer user.

cont
C6⁵
22. The process of Claim 21, wherein said delivered redemption denomination and said first public key identifier are included in a printed form of said issued certificate.

23. The process of Claim 21, wherein said delivered redemption denomination and said first public key identifier are included in an electronic form of said issued certificate.

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25. The process of Claim 16, wherein within said authorizing step, said holder of said issued certificate is said alternate recipient.

C8
27. The process of Claim 26, wherein said entered established private key is uniquely associated with a single acquired issued certificate.
